

UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 1 of 1

PATENT NO. : 7,365,534
APPLICATION NO.: 10/500,950
ISSUE DATE : April 29, 2008
INVENTOR(S) : Nilesht TRALSHAWALA et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

(75) Inventors: "...Yuri Polyako, East Setauket, NY (US) ..." should be changed to ...Yuri Polyakov, East Setauket, NY (US)...

MAILING ADDRESS OF SENDER (Please do not use customer number below):

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575 Madison Avenue
New York, NY 10022-2585

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor : Nilesh TRALSHAWALA et al.
U. S. Patent No. : 7,365,534
Serial No. : 10/500,950
Issued : April 29, 2008
For : APPARATUS FOR MEASURING...

July 11, 2008

Certificate of Corrections Branch
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REQUEST FOR A CERTIFICATE OF CORRECTION

SIR:

We request a Certificate of Correction under 35 U.S.C. §254, to correct on the front page of the Patent the third inventor, which was incorrectly listed as "...Yuri Polyako, East Setauket, NY (US)..." Please change the same to read: "... Yuri Polyakov, East Setauket, NY (US)..."

Attached, please find a copy of Page 1 of the Patent, Filing Receipt and Declaration.

This was due to an error made by the USPTO.

Any fee due as a result of this paper, may be charged to Deposit account No. 50-1290.

Respectfully submitted,

/Dexter T. Chang/_____

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Reg. No. 44,071

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Docket No.: CARDM 19.258(100554-00068)



US007365534B2

(12) **United States Patent**
Tralshawala et al.(10) Patent No.: **US 7,365,534 B2**
(45) Date of Patent: **Apr. 29, 2008**(54) **APPARATUS FOR MEASURING MAGNETIC FIELDS USING A SUPERCONDUCTING QUANTUM INTERFERENCE DEVICE**(56) **References Cited**

U.S. PATENT DOCUMENTS

4,324,255 A 4/1982 Barach et al.

(Continued)

FOREIGN PATENT DOCUMENTS

JP 4-160380 6/1992

(Continued)

OTHER PUBLICATIONS

N. Ishikawa et al. "Effect of RF Interference on Characteristics of DC SQUID System" IEEE Transactions on Applied Superconductivity, vol. 3 No. 1, Mar. 1993, pp. 1910-1913.

(Continued)

Primary Examiner—Jay M. Patidar
(74) Attorney, Agent, or Firm—Katten Muchin Rosenman LLP

(57)

ABSTRACT

An instrument for measuring sub-pico Tesla magnetic fields using a superconducting quantum interference device (SQUID) inductively coupled to an unshielded gradiometer includes a filter for filtering magnetically and electrically coupled radio frequency interference (RFI) away from the SQUID. This RFI is principally coupled to the SQUID via the unshielded gradiometer. The filter circuit includes a resistor-capacitor (RC) combination interconnected to first and second terminals so that it is parallel to both an input coil of the SQUID and the gradiometer. In addition, a shielding enclosure is used to electromagnetically shield the filter circuit from the SQUID, and a method is employed to increase the impedance between the input coil and the SQUID without diminishing the overall sensitivity of the instrument.

9 Claims, 12 Drawing Sheets(75) Inventors: Niles Tralshawala, Clifton Park, NY (US); Alexander Bakharev, Niskayuna, NY (US); ~~Yuri Polyakov~~, East Setauket, NY (US) **yuri Polyakov**

(73) Assignee: CardioMag Imaging, Inc., Schenectady, NY (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 23 days.

(21) Appl. No.: 10/500,950

(22) PCT Filed: Feb. 26, 2003

(86) PCT No.: PCT/US03/05752

§ 371 (c)(1).

(2), (4) Date: Jul. 7, 2004

(87) PCT Pub. No.: WO03/073117

PCT Pub. Date: Sep. 4, 2003

(65) **Prior Publication Data**

US 2004/0239319 A1 Dec. 2, 2004

Related U.S. Application Data

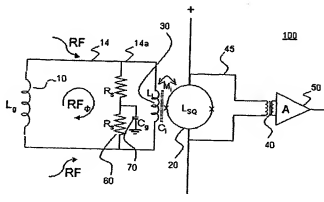
(60) Provisional application No. 60/360,090, filed on Feb. 26, 2002.

(51) Int. Cl. **G01R 33/035** (2006.01)

(52) U.S. Cl. 324/248; 505/846

(58) Field of Classification Search 324/248, 324/244, 260, 262; 505/842-846; 327/527

See application file for complete search history.





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APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/500,950	07/07/2004	1652	385	CARD 19,258 (100554-00068	12	13	2

CONFIRMATION NO. 1493

026304
 KATTEN MUCHIN ZAVIS ROSENMAN
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FILING RECEIPT



OC00000013511942

Date Mailed: 08/12/2004

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections, facsimile number 703-746-9195. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Nilesh Traishawala, Clifton Park, NY;
 Alexander Bakharev, Niskayuna, NY;
 Yuri Polyakov, East Setauket, NY;

Domestic Priority data as claimed by applicant

This application is a 371 of PCT/US03/05752 02/26/2003
 which claims benefit of 60/360,090 02/26/2002

Foreign Applications

Projected Publication Date: To Be Determined - pending completion of Security Review

Non-Publication Request: No

Early Publication Request: No

** SMALL ENTITY **

Title

Sub-picotesla magnetic field detector

Preliminary Class

435

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10/500950

PTO/SB/0168-03

Approved for use through 07/31/2008. OMB 0051-0032

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**DECLARATION FOR UTILITY OR
DESIGN
PATENT APPLICATION
(37 CFR 1.63)**



Declaration
Submitted
With Initial
Filing

OR



Declaration
Submitted after Initial
Filing (surcharge
(37 CFR 1.16 (e))
required)

Attorney Docket Number

CARD19.258(100554-00068)

First Named Inventor

TRALSHAWALA, Nilesh

COMPLETE IF KNOWN

Application Number

concurrently herewith

Filing Date

concurrently herewith

Art Unit

Examiner Name

I hereby declare that:

Each inventor's residence, mailing address, and citizenship are as stated below next to their name.

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

SUB-PICOTESLA MAGNETIC FIELD DETECTOR

(Title of the Invention)

the specification of which



is attached hereto

OR



was filed on (MM/DD/YYYY)

as United States Application Number or PCT International

Application Number

and was amended on (MM/DD/YYYY)

(if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

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Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				Yes	No
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

[Page 1 of 2]

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NAME OF SOLE OR FIRST INVENTOR:

☐ A petition has been filed for this unsigned inventor

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Inventor's

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☒

Additional inventors or a legal representative are being named on the supplemental sheet(s) PTO/SB/02A or 02LR attached hereto.

DECLARATION

ADDITIONAL INVENTOR(S)
Supplemental Sheet

Page 3 of 3

Name of Additional Joint Inventor, if any:

☐ A petition has been filed for this unsigned inventor

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POLYAKOV

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Residence: City

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Name of Additional Joint Inventor, if any:

☐ A petition has been filed for this unsigned inventor

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Residence: City

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